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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER				
KURTZ, BENJAMIN M				
ART UNIT		PAPER NUMBER		
1797				
MAIL DATE		DELIVERY MODE		
12/24/2008		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/552,629

Applicant(s)

TRYGGVASON ET AL.

Examiner

BENJAMIN KURTZ

Art Unit

1797

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 November 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 23, 24, 26-44 and 46-71 is/are pending in the application.
- 4a) Of the above claim(s) 61-69 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 23, 24, 26-44, 46-60, 70 and 71 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07 October 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Claims 23, 24, 26-44 and 46-71 are pending, claims 61-69 are withdrawn and claims 1-22, 25 and 45 are cancelled.

Claim Rejections - 35 USC § 102 and 103

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

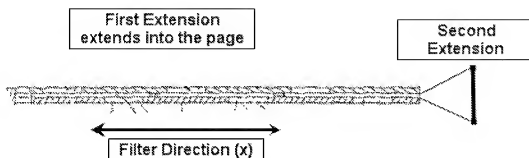
The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 23, 28, 29, 32-36 and 39-42 are rejected under 35 U.S.C. 102(b) as being anticipated by Medworth US 5 976 370.

Claim 23, Medworth teaches a cartridge including: an inner space (12), an inlet, an outlet (22), and at least a first filter (10) arranged at the outlet, the filter permits passage of liquid through the filter in a filter direction, preventing passage of particulate material, the filter includes at least one slit shaped opening (gap between (24) and (26)) which has a first extension and a second extension being substantially perpendicular to the filter direction and to the first extension, wherein the second extension is significantly shorter than the first extension and is also significantly shorter than the length of the slit shaped opening in the filter direction (fig. 3, below). The recitation of the cartridge containing a particulate material is a recitation of intended use and does not further structurally limit the cartridge.



Claims 28, 29, 32-36 and 39-42, Medworth further teaches the second extension is $\sim 0.254\text{mm}$ (col. 3, lines 9-15); the first extension is substantially perpendicular to the filter direction (see above); the filter includes a filter element (24 and 26) wherein the slit shaped opening extends through the filter element (fig. 3); the filter includes a plurality of slit shaped openings which extend through the filter element (fig. 3); the first extension extends towards a centre point of the filter element (fig. 3); the filter element has a shape of a substantially plane disc (col. 2, lines 45-50); the filter element is formed by a first disc (24) and a second disc (26) which are arranged substantially parallel with each other and separated from each other by an interspace that form the slit shaped opening (fig. 3); the interspace is formed by distance members (36) arranged in the interspace between the discs each of the distance members having a predetermined height corresponding to the second extension (fig. 1,3); each of the distance members includes a projection extending from one of the first disc and the second disc (fig. 1,3); and the first disc is provided with at least one aperture forming an outlet passage to the interspace and the second disc is provided with at least one aperture forming an inlet passage from the interspace (fig. 3).

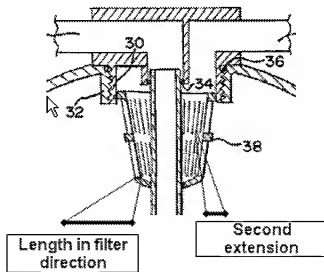
2. Claims 23, 32-34, 37, 38 and 43 are rejected under 35 U.S.C. 102(b) as being anticipated by Weis US 3 730 348.

Claim 23, Weis teaches a cartridge including: an inner space, an inlet, an outlet and at least a first filter (30) arranged at the outlet wherein the filter includes at least one slit shaped opening (45) which has a first extension and a second extension being substantially perpendicular to the filter direction and to the first extension, wherein the second extension is shorter than the first extension and is also shorter than the length of the slit shaped opening in the filter direction (fig. 5). The recitation of the cartridge containing a particulate material is a recitation of intended use and does not further structurally limit the cartridge.

Claims 32-34, 37, 38 and 43, Weis further teaches the first extension is substantially perpendicular to the filter direction (fig. 5); the filter includes a filter element, wherein the slit shaped opening extends through the filter element (fig. 5); the filter includes a plurality of slit shaped openings which extend through the filter element (fig. 5); the filter element has a conical shape (fig. 2); the slit shaped opening of the filter element has a first end and a second end, wherein the second extension of the slit shaped opening increases from a minimum value at one of the ends of the slit shaped opening to a maximum value at the other end of the opening (fig. 5); and the filter is made through an injection molding process (col. 3, lines 40-45).

3. **Claims 23, 24, 32-35, 37, 44 and 52-57 are rejected under 35 U.S.C. 102(e) as being anticipated by Barlow US 6 776 907.**

Claim 23, Barlow teaches a cartridge including: an inner space, an inlet, an outlet and at least a first filter (38) arranged at the outlet wherein the filter includes at least one slit shaped opening (40) which has a first extension and a second extension being substantially perpendicular to the filter direction and to the first extension, wherein the second extension is shorter than the first extension and is also shorter than the length of the slit shaped opening in the filter direction (fig. 1,3,4). The recitation of the cartridge containing a particulate material is a recitation of intended use and does not further structurally limit the cartridge.



Claims 24, 32-35 and 37, Barlow further teaches a second filter (18) arranged at the inlet, the second filter includes at least one slit shaped opening (20), which has a first extension and a second extension being substantially perpendicular to the filter direction and to the first extension, wherein the second extension is significantly shorter

than the first extension (fig. 1,5); the first extension is substantially perpendicular to the filter direction (fig. 3,4); the filter includes a filter element, wherein the slit shaped opening extends through the filter element (fig. 3,4); the filter includes a plurality of slit shaped openings which extend through the filter element (fig. 3,4); the first extension of each slit shaped opening extends in a radial direction towards a center point of the filter element (fig. 3,4); and the filter element has a conical shape (fig. 3,4).

Claim 44, Barlow teaches a cartridge including: an inner space, an inlet, an outlet at least a first filter (18) and at least a second filter (38) arranged at the inlet wherein the second filter includes at least one slit shaped opening, which has a first extension and a second extension being substantially perpendicular to the filter direction and to the first extension, wherein the second extension is significantly shorter than the first extension and is also significantly shorter than the length of the slit shaped opening in the filter direction (fig. 3,4 and above).

Claims 52-57, Barlow further teaches the first extension is substantially perpendicular to the filter direction (fig. 3,4); the filter includes a filter element wherein the slit shaped opening extends through the filter element (fig. 3,4); the filter includes a plurality of slit shaped openings which extend through the filter element (fig. 3,4); the first extension of each opening extends in a radial direction towards a center point of the filter element (fig. 3,4); the filter element has a conical shape (fig. 3,4); and the filter includes a peripheral support portion connected to the filter element and abutting an inner wall of the cartridge (fig. 3).

4. Claims 23, 24, 26-35, 37, 44, 46-56, 60, 70 and 71 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kahana US 5 637 214.

Claim 23, Kahana teaches a cartridge including: an inner space, an inlet, an outlet and at least a first filter (62) arranged at the outlet wherein the filter includes at least one slit shaped opening (64) which has a first extension and a second extension being substantially perpendicular to the filter direction and to the first extension, wherein the second extension is shorter than the first extension (fig. 2-4). The recitation of the cartridge containing a particulate material is a recitation of intended use and does not further structurally limit the cartridge. Kahana does not teach the second extension is also significantly shorter than the length of the slit shaped opening in the filter direction.

The only different between the prior art and the claimed invention is a recitation of relative dimension. [W]here the only difference between the prior art and the claims was a recitation of relative dimensions of the claimed device and a device having the claimed relative dimensions would not perform differently than the prior art device, the claimed device was not patentably distinct from the prior art device, *Gardner v. TEC Systems, Inc.*, 220 USPQ 777 (1984).

Claim 24, Kahana further teaches a second filter (34) arranged at the inlet, the second filter includes at least one slit shaped opening (48), which has a first extension and a second extension being substantially perpendicular to the filter direction and to the first extension, wherein the second extension is significantly shorter than the first extension (fig. 2).

Claims 32-35, 37, Kahana further teaches the first extension is substantially perpendicular to the filter direction (fig. 2-4); the filter includes a filter element (62) wherein the slit shaped opening extends through the filter element (fig. 2-4); the filter includes a plurality of slit shaped openings which extend through the filter element (fig. 2-4); the first extension extends towards a center point of the filter element (fig. 3-4); and the filter element of the second filter has a conical shape (fig. 2).

Claim 44, Kahana teaches a cartridge including: an inner space, an inlet, an outlet at least a first filter (62) and at least a second filter (34) arranged at the inlet wherein the second filter includes at least one slit shaped opening, which has a first extension and a second extension being substantially perpendicular to the filter direction and to the first extension, wherein the second extension is significantly shorter than the first extension (fig. 2). Kahana does not teach the second extension is also significantly shorter than the length of the slit shaped opening in the filter direction.

The only different between the prior art and the claimed invention is a recitation of relative dimension. [W]here the only difference between the prior art and the claims was a recitation of relative dimensions of the claimed device and a device having the claimed relative dimensions would not perform differently than the prior art device, the claimed device was not patentably distinct from the prior art device, *Gardner v. TEC Systems, Inc.*, 220 USPQ 777 (1984).

Claims 52-56, Kahana further teaches the first extension is substantially perpendicular to the filter direction (fig. 2); the filter includes a filter element (50) wherein the slit shaped opening extends through the filter element (fig. 2,4); the filter includes a

plurality of slit shaped openings which extend through the filter element (fig. 2,4); the first extension of each opening extends in a radial direction towards a center point of the filter element (fig. 2,4); and the filter element has a conical shape (fig. 2).

Claims 26-30, 46-50, 70 and 71, Kahana does not teach the specific dimensions of the second extension. The only difference between the prior art and the claimed invention is a recitation of relative dimension. [W]here the only difference between the prior art and the claims was a recitation of relative dimensions of the claimed device and a device having the claimed relative dimensions would not perform differently than the prior art device, the claimed device was not patentably distinct from the prior art device, *Gardner v. TEC Systems, Inc.*, 220 USPQ 777 (1984).

Claims 31 and 51, Kahana teaches the filter and cartridge of claims 1, 23 and 44 where the filter is made of a plastic (col. 2, line 56) but does not teach the filter being polypropylene or polycarbonate. These polymers are very well known in the art to be used to make a filter and would have been obvious to one of ordinary skill in the art at the time of invention because of their resistance to corrosion, ease of manufacture and relatively cheap cost.

Claim 60, Kahana does not teach how the filter is made. "[E]ven though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process." *In re Thorpe*, 227 USDQ

964 (1985). The process of making the filter of Kahana is deemed a structural alternative to the process of injection molding.

5. Claims 38 and 59 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kahana '214 in view of Correge et al. US 4 421 646, Weis et al. US 3 730 348 and Marks US 3 317 044.

Kahana teaches the filter and cartridge of claims 33 and 44 as detailed above, where the slit shaped opening of the filter element has a first and a second end but does not teach the second extension increasing from one end to the other. Changing the cross section of the slit over the length is only a change in the shape of the slit and is very well known in the art as shown in Correge, Weis and Marks. The configuration of the apparatus is a matter of choice which a person of ordinary skill in the art would have found obvious absent persuasive evidence that the particular configuration is significant, *In re Dailey*, 149 USPQ 47 (1966). Also, all the claimed elements, i.e. the shape of the slit, were known in the prior art and one skilled in the art could have combined the elements as claimed by known methods with no change in their respective functions, and the combination would have yielded predictable results to one of ordinary skill in the art at the time of the invention, *KSR International Co. v. Teleflex Inc.*, 82 USPQ2d 1385 (2007).

6. Claim 58 is rejected under 35 U.S.C. 103(a) as being unpatentable over Barlow '907 in view of Richmond US 5 545 318.

Barlow teaches the filter and cartridge of claim 57 where the peripheral support portion has a peripheral surface but does not teach a plurality of ridges. Richmond teaches a peripheral support (66) for a filter that includes a plurality of ridges (88) projecting from the peripheral surface and abuts an inner wall of a cartridge, wherein a thin gap (90) is formed between the peripheral surface and the inner wall, the gap providing a further passage for fluid (fig. 4,8). It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the peripheral support as taught by Richmond with the filter of Barlow because the flange passages allow for increased flow through the filter (col. 6, lines 1-2).

Response to Arguments

7. Applicant's arguments filed 11/11/08 have been fully considered but they are not persuasive. Applicant argues that the claimed invention is not obvious over Kahana. Applicant has not specifically shown that the recitation of relative dimension is not the only difference between the claimed invention and the filter of Kahana. Applicant also argues that the claimed invention performs differently than the prior art device to Kahana. Applicant cites the intended use of Kahana is different than that of the claimed invention. However, applicant has not provided any secondary evidence showing that the invention as claimed would perform any differently than one of ordinary skill in the

art would expect of the prior art device with the claimed inventions. For at least these reasons applicant's arguments are not persuasive.

Applicant's arguments with respect to claims 23 and 44 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to BENJAMIN KURTZ whose telephone number is

(571)272-8211. The examiner can normally be reached on Monday through Friday 8:00am to 4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Sample can be reached on 571-272-1376. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Benjamin Kurtz
Examiner
Art Unit 1797

/Benjamin Kurtz/
Examiner, Art Unit 1797
12/18/08

/Krishnan S Menon/
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